

Diagnostic Software

Isolating a faulty PC component can be time-consuming and tedious. Karl Wright tests six diagnostic programs that can take the stress out of fault-finding

There are few things more annoying than knowing that there's something wrong with your PC, but not being able to find out where the fault lies. If you have enough time – and a full complement of replacement parts – you could remove each component in turn until you find the faulty one. If the problem lies with a program or Windows itself, though, you'll be back to square one. Alternatively, you could buy some diagnostic software.

A good diagnostic program tests the memory, the hard disk and the processor. Some diagnostic software

can also analyse Windows components, such as the Registry and hard disk file allocation tables.

With good diagnostic software you can identify the problem without even unscrewing the side of your PC case, and the most comprehensive tools can assess your PC's performance as a whole, too. Get a poor diagnostic program, though, and you'll be none the wiser as to the cause of your woes and you may even follow a false lead, which could prove expensive.

We've tested six diagnostic programs thoroughly to see which enable you to pinpoint your PC's problems.

FRESH DEVICES Fresh Diagnose

★★★

Free

Fresh Diagnose is free, which means it would have to be absolutely ghastly not to be good value. Thankfully, it isn't ghastly – it's just mediocre.



▲ Fresh Diagnose is full of data, but it can't fix faults

Most of the program's modules are designed simply to gather information about your PC's components, software and hardware. Under Software System, for instance, you will find all the information you could need about the way Windows has been configured. Frustratingly, however, you can't do anything with this information. The software tells you which programs have been set up to start every time Windows starts, for example, but it doesn't let you edit the list. If you don't know how to use the system configuration utility, you'll be a bit lost. Much the same is true of the Traces tab, which shows all the traces of your Windows and internet activity it can find on your PC but won't let you edit or delete them.

As with Advanced System Optimizer, the program at least provides comprehensive information about the components in your PC. It also comes with reasonably good built-in benchmarks. These can be somewhat cryptic and will be difficult for novices to interpret, but if you're content simply to compare your PC's score with various reference marks for different pieces of hardware, these benchmarks will help you identify bottlenecks in your system.

SUMMARY

- ✓ Free
- ✗ Difficult for beginners to understand
- ✗ Doesn't let users edit data

DIAGNOSTIC SOFTWARE Requires Windows NT/2000/XP, Pentium processor, 32MB RAM
SUPPLIER www.freshdevices.com
DETAILS www.freshdevices.com

MICRO 2000 Micro-Scope

★★★★

£246 inc VAT

Micro-Scope is different to the other programs in this test. It's designed for IT professionals and enthusiasts, it boots from its own CD and its hardware tests are



▲ A professional diagnostic tool with a price to match

more extensive than those of any other program here.

As it boots from CD and runs independently of the operating system, Micro-Scope can be used with Windows, Linux and Mac OS systems.

The system configuration module interrogates each piece of hardware and provides information on the make and model, and also which resources each component uses. The Compare Settings feature tells you if any of your hardware has been set up incorrectly in the BIOS, and you can even edit the BIOS from within the program. The Diagnostics and Utilities tabs provide extensive testing tools for all the major hardware components, as well as facilities for advanced maintenance tasks such as restoring the master boot record and the BIOS.

There are a few niggles: the interface needs to be updated, and although the program supports newer standards such as SATA, no mention is made of this in the program (SATA drives simply appear as IDE drives).

This is an excellent piece of software, but it should be at this price. Micro-Scope is great for professionals and hardcore enthusiasts, but everyone else should stick with SiSoft Sandra.

SUMMARY

- ✓ Operating system-independent
- ✓ Very comprehensive
- ✗ Expensive

DIAGNOSTIC SOFTWARE Requires Pentium processor, bootable CD drive or 3½in floppy, 1MB RAM
SUPPLIER www.micro2000.co.uk
DETAILS www.m2k.co.uk

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SISOFT Sandra Pro Home

★★★★★

£34 inc VAT

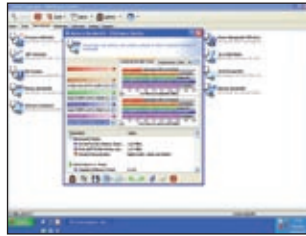


Sandra is probably the best-known of all diagnostic programs. It's been around for ages and the Lite version of it is free (and available in the Expert Toolkit section of our cover DVD).

Even when you have the correct drivers installed for your hardware, it can be difficult to tell exactly what some components are, particularly motherboard components and devices such as integrated graphics cards. In our experience, Sandra has always been able to determine the model and revision of even the most obscure components. The program is stuffed full of modules that provide detailed information, from the version of your PC's BIOS and the type and speed of memory you have to the individual assignment of resources such as IRQs and memory address space.

A number of benchmark programs under the Tools tab can test components in your system and then compare their performance with several benchmark scores. However, many of the modules also identify potential conflicts and problems and advise you on how to fix them. Sandra also has a software section that returns information on Windows and other programs you have installed. Impressively, you can set Sandra to email regular performance reports to you.

This is a comprehensive, easy-to-use and genuinely useful diagnostic program. It wins our Best Buy award.



▲ You can trust Sandra Pro Home to root out your PC problems

SUMMARY

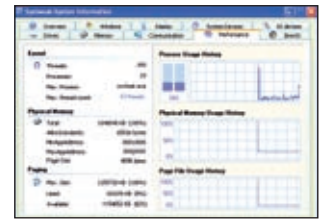
- ✓ Lots of features
- ✓ Strenuous tests
- ✗ Requires knowledge from user

DIAGNOSTIC SOFTWARE Requires Windows 2000/XP, Pentium processor, 64MB RAM SUPPLIER www.sisoft.co.uk DETAILS www.sisoft.co.uk

SYSTWEAK Advanced System Optimizer

★★★★

£30 inc VAT



▲ Advanced System Optimizer can access hard-to-find settings

Advanced System Optimizer focuses on software optimisation. Its main modules allow you to clean your system, for instance by defragging the hard disk and removing invalid entries from the Registry. The Windows Optimizer module provides access to common settings that are often hard to find and to some settings that you'd normally have to change in the Registry, such as the length of time web addresses remain in the Windows DNS cache.

There's also a memory-optimising utility. We tried it on two PCs, but in neither case did it free more than around two per cent of the available memory. However, the system information feature makes it possible to find the exact make and model of most important pieces of hardware in your PC quickly. This information alone can often make all the difference when diagnosing a problem.

Many of the other modules sit a little oddly in a diagnostic and repair facility. There's an organiser module, with a calendar and sticky notes. It works fine, but it can't compare with similar features in popular email programs. Similarly, the backup and restore feature is basic, and the 'beautify Windows' module is pointless (it simply gives you access to Windows features that aren't difficult to find anyway), and has nothing to do with diagnosis or optimisation.

This program does what it does well enough, but there isn't enough here to justify the price.

SUMMARY

- ✓ Lots of features
- ✓ Easy to use
- ✗ Expensive

DIAGNOSTIC SOFTWARE Requires Windows 98/Me/NT/2000/XP/Vista, Pentium processor, 32MB RAM SUPPLIER www.systweak.com DETAILS www.systweak.com

TESTMYHARDWARE.COM Test My Hardware

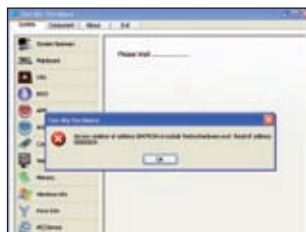
★★

Free

Like Fresh Diagnosis, Test My Hardware is free. Also like Fresh Diagnosis, its main function is to tell you the make and model of all the hardware in your PC. In fact, this is pretty much all it does, making its name a bit of a misnomer.

The program consists of two tabs: one lists your PC's main system components and their properties, while the other does the same for peripherals. We tested the software on two PCs – one desktop and one laptop, from different manufacturers with entirely different hardware – and in neither case did the System Summary entry work.

The other modules in the program worked well, in their limited way. Each identified the individual hardware components in our test PCs, providing information on the specifications of that hardware and, in some cases, details of how the hardware had been configured (the resolution and bit depth at which the graphics card was running, for instance). For the most part, however, the program doesn't tell you as much as Fresh Diagnosis or the free version of SiSoft Sandra. As there are no stress tests or benchmarks, real diagnostic functions are extremely limited.



▲ Test My Hardware's System Summary failed to work, twice

SUMMARY

- ✓ Free download
- ✗ Very basic testing
- ✗ System Summary failed to work

DIAGNOSTIC SOFTWARE Requires Windows 98/2000/XP/Vista, Pentium processor, 64MB RAM SUPPLIER www.testmyhardware.com DETAILS www.testmyhardware.com

VCOM Fix-It Utilities 7 Professional

★★★★

£34 inc VAT



▲ Hardware diagnosis is good, but not as good as Sandra's

This program includes modules for diagnosing hardware and software problems, monitoring system resources, cleaning up the Registry, checking and defragging the hard disk and creating system restore points. It also comes with a built-in virus checker.

The hardware diagnosis module worked well, although it provided less detailed information than SiSoft Sandra. There's also no module that simply tells you the make and model of the components in your system; to do this, you have to go through the time-consuming process of actually running the benchmarks. The error-tracker's performance was hit and miss, resolutely ignoring several error messages, and some of the features Fix-It claims to provide – such as the startup list and the Registry editor – can actually be accessed just as easily in Windows.

However, this software packs a lot into one suite and makes optimising your PC easy, with a series of one-click wizards that novices can use to optimise settings and diagnose all potential problems. It includes an excellent bootable disc, from which you can restore a system that won't start from one of the suite's recovery points.

Fix-It is a good choice for novices, but experienced users are better off with Sandra. **CS**

SUMMARY

- ✓ Lots of features
- ✓ Easy to use
- ✗ Could provide more information

DIAGNOSTIC SOFTWARE Requires Windows 2000/XP/Vista, Pentium III processor, 64MB RAM SUPPLIER <http://shop.avanquest.com/uk> DETAILS www.vcom.com